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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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CERVETTI, DAVID GARCIA

ART UNIT	PAPER NUMBER
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2136

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/20/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/615,928

Applicant(s)

NILSEN ET AL.

Examiner

David G. Cervetti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-10 are pending and have been examined. Preliminary amendment filed concurrently with this application has been considered.

#### ***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

3. Examiner respectfully requests the filing of an information disclosure statement listing the documents cited in the specification and complying with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed.

#### ***Specification***

4. The disclosure is objected to because of the following informalities: "IP", "Ipsec, VPN" (page 1); "NAT" (page 2); "DMZ" (page 3); "ICMP", "MAC" (page 4); "WLAN" (page 5); "LAN", "PDA", "TCP/IP", "PPP" (page 11); "L2TP", "PPTP" (page 26). These terms have not been defined. **This is not intended to be a complete list of informalities. Appropriate correction is required.**

#### ***Claim Objections***

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5. Claims 1-10 are objected to because of the following informalities: "mobil IP", "tunnell", perhaps "mobile IP" and "tunnel" were intended. Examiner has interpreted these as "mobile IP" and "tunnel".

6. Claim 5 is objected to because of the following informalities: "control", "inconsistances".

7. Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 claims "a mobil data communications terminal" and claim 7 recites "a mobil IP terminal".

8. Claim 1 is objected to because of the following informalities: "IP", "DMZ" must be spelled out. Appropriate correction is required.

9. Claim 4 is objected to because of the following informalities: "ICMP", "MAC", "WLAN" must be spelled out. Appropriate correction is required.

10. **This is not intended to be a complete list of informalities. Appropriate correction is required.**

#### ***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

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which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. "mobil IP" and "tunnell", the specification fails to describe any of these terms, it describes "mobile IP" and "tunnel" but it appears to use these terms in an attempt to differentiate them from the terms used in the claims.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-10 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

15. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

***Claim Rejections - 35 USC § 101***

16. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

17. Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 8 states "a computer program product comprising a data carrier having thereon a computer program code loadable and executable in a mobil IP data communications terminal". A "data carrier having thereon a computer program code" does not fall within the categories of patentable subject matter set forth in USC 101. Claim 8 is not limited to tangible embodiments, absent a clear definition of what a data carrier is, Examiner has interpreted it as including transmission media.

18. To expedite a complete examination of the application, the claims rejected under 35 U.S.C. 101 (non-statutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

***Claim Rejections - 35 USC § 102***

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

20. **Claims are rejected under 35 U.S.C. 102(a) as being anticipated by Forslow (US Patent Application Publication 2002/0133534).**

**Regarding claim 1, Forslow teaches an arrangement in a mobil data communications terminal (103) for providing mobil IP communication via a dual tunnelling**

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IP packet data connection between a first application (121) in the mobil data communications terminal and a second application (101) in a second terminal in communication with an inner network (105), said inner network directly or via a firewall (104) connected with an outer network (107), wherein an outer mobil IP home agent (102) is arranged in the outer network or in a DMZ (106) associated with the firewall and an inner mobil IP home agent (130) is arranged in the inner network **(abstract)**, said arrangement comprising:

- a first mobil IP client part (116) configurable for association with the inner mobil IP home agent (130), said first mobil IP client part arranged to convey data between the first application and the second mobil IP client part and to an inner tunnelling part (123) directed to the inner home agent **(paragraphs 123-125)**, and
- a second mobil IP client part (115) configurable for association with the outer mobil IP home agent (102), said second mobil IP client part arranged to convey data between the first mobil IP client part and the outer network and to an outer tunnelling part (124) directed to the outer home agent **(paragraphs 123-133)**.

**Regarding claim 9**, Forslow teaches an information technology (IT) system for providing a packet data connection between a first application (121) operable in a mobil data communications terminal (103) and a second application (101) operable in a second terminal in an inner network (105) protected by a firewall (104), said system arranged for communication by means of mobil IP with a system comprising the inner

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network, an outer network (107) and an outer home agent (102) arranged in the outer network or in a DMZ (106) associated with the firewall arranged between the inner and outer network (**abstract**), wherein:

- an inner home agent (130) is arranged in the inner network (**paragraphs 123-125**), and
- said inner home agent is configurable for association with a first mobil IP client part (116) operable in the mobil data communications terminal, and said outer home agent is configurable for association with a second mobil IP client part (115) operable in the mobil data communications terminal (**paragraphs 123-130**),
- said first mobil IP client part being arranged to convey data between said fast application and said other mobil IP client part and to an inner tunnelling part (123) directed to the inner home agent (**paragraphs 123-130**), and
- said second mobil IP client part being arranged to convey data between said first mobil IP client part and said outer network and to an outer tunnelling part (124) directed to said outer home agent (**paragraphs 129-133**).

**Regarding claim 10**, Forslow teaches a data communications system for providing a packet data connection between a first application operable in a mobil data communications terminal (103) and a second application (101) operable in a second terminal connected to an inner network (105) protected by a firewall (104), said system arranged for communication by means of mobil IP via a system comprising the inner



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network, an outer network (107) and an outer home agent (102) arranged in said outer network or in a DMZ (106) associated with the firewall (104) being arranged between the inner and outer networks (**abstract**), wherein:

- an inner home agent (130) is arranged in the inner network (**paragraphs 123-125**), and
- said mobil data communications terminal including: c. a first mobil IP client part (116) configurable for association with said inner mobil IP home agent (130), said first mobil IP client part arranged to convey data between said first application and said second mobil IP client part and to an inner tunnelling part (123) directed to said inner home agent (**paragraphs 123-130**), and
- d. a second mobil IP client part (115) configurable for association with said outer mobil IP home agent (102), said second mobil IP client part being arranged to convey data between said first mobil IP client part and said outer network and to an outer tunnelling part (124) directed to said outer home agent (**paragraphs 129-133**).

**Regarding claim 2**, Forslow teaches wherein said second mobil IP client part further is configurable to also convey data between the first application and the outer network, and said arrangement further comprising a device which, if the terminal obtains access via the outer network, is arranged to provide a first connection between the first application and the first mobil IP client part, a second connection between the first mobil IP client part and the second mobil IP client part, and a third connection between the

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second mobil IP client part and the outer mobile IP home agent, and if the terminal obtains access via the inner network, is arranged to provide a fourth connection between the first application and the second mobil IP client part, and a fifth connection between the second mobil IP client part and the inner mobile IP home agent **(paragraphs 123-130).**

**Regarding claim 3,** Forslow teaches wherein said first mobil IP client part (116) is controllable for activation or deactivation, and said arrangement further comprising a mobil IP detection device **(paragraphs 135-136):**

- c. said mobil IP detection device adapted to activate the first mobil IP client part on detection of a connection to the inner network (105) and a successful mobil IP registration with the inner home agent (130) **(paragraphs 136-137), and**
- d. said mobil IP detection device adapted to activate the second mobil IP client part on detection of a connection to the outer network (107) and a successful mobil IP registration with the outer home agent (130) **(paragraphs 135-138).**

**Regarding claim 4,** Forslow teaches wherein said first mobil IP client part (116) is controllable for activation and deactivation, and that the arrangement further comprises a mobil IP detection device arranged to activate the first mobil IP client part on detection of connection to the outer network (107) by means of at least one of a detection device selected **(paragraphs 135-143)** from a group comprising:

- e. a first monitoring device arranged to determine the source IP address of an incoming packet and to determine that the address is outside an address range configured for the inner network (105) (**paragraphs 139-140**),
- f. a second monitoring device arranged to analyze ICMP control messages and arranged to determine that an address associated with the ICMP control message is outside an address range configured for the inner network (105) (**paragraphs 134-136**),
- g. a third monitoring device arranged to detect an outer home agent (102) on transmission of a registration message with improper security association (**paragraphs 150-156**), and
- h. a fourth monitoring device arranged to compare results from said first and second monitoring devices with collected history regarding MAC and IP addresses to Mobil IP Foreign Agents, Default gateways, and WLAN access points that indicate that the mobil terminal is operating in the outer network (**paragraphs 132-134**), and
- wherein at least one of said detection devices (a, b, c, d) is arranged to indicate that the mobil terminal (103) is connected to the outer network (**paragraphs 132-134**).

**Regarding claim 5**, Forslow teaches wherein

- said first mobil IP client part (116) is controllable for deactivation, and said arrangement further comprising a mobil IP detection device

arranged for deactivating the first mobil IP client part on detection of a connection to the outer network (107) by means of at least one of a detection device selected from **(paragraphs 135-143)**:

- e. a first monitoring device arranged to determine the source IP address of an incoming packet and arranged for detecting that the address is inside an address range figured for the inner network (105) **(paragraphs 139-140)**,
- f. a second monitoring device arranged to analyze ICMP control messages and arranged to detect that an address associated with the ICMP control message is inside an address range configured for the inner network (105) **(paragraphs 134-136)**,
- g. a third monitoring device arranged to detect an inner home agent (130) on transmission of a registration message with incorrect security association **(paragraphs 150-156)**, and
- h. a fourth monitoring device arranged to detect inconsistencies in results from the first, the second and the third monitoring devices and collected history regarding MAC and IP addresses to Mobil IP Foreign Agents, Default Gateways, and WLAN access points that indicate that the mobil terminal is operating in the inner network (105) **(paragraphs 132-134)**, and

- wherein at least one of said detection devices (a, b, c, d) is arranged to indicate that the mobil terminal (103) is connected to the inner network **(paragraphs 132-134).**

**Regarding claim 6**, Forslow teaches wherein said arrangement further comprises, a third security client part interposed between the first and second mobil IP client parts and configurable for via a security arrangement arranged between said inner and outer networks establishing a secure connection with the inner network **(paragraphs 135-137).**

**Regarding claim 7**, Forslow teaches a mobil IP terminal, wherein said mobil IP terminal comprises an arrangement according to claim 1 **(paragraphs 132-140).**

**Regarding claim 8**, Forslow teaches a computer program product comprising a data carrier having thereon a computer program code loadable and executable in a mobil IP data communications terminal, wherein said computer program code when loaded and executed in the mobil IP data communications terminal effects the establishment of an arrangement as recited in claim 1 **(paragraphs 132-140).**

### ***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kakemizu et al. (US Patent 7,068,640) teaches VPN system in mobile IP network, and method of setting VPN.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-

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5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off on Wednesday.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DGC

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12,18,06